

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mauldin, et al.

Confirmation No.:

Serial No.: 10/708,693

Group Art Unit: 1711

Filed: June 4, 2004

Sir:

Examiner: Boykin

Docket No.: 820322-1030

For: Separation of Polyolefins from Nylon

INFORMATION DISCLOSURE STATEMENT

05/05/2005 YPULITE1 00000040 200778 10708693

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

01 FC:1806 180.00 DA

This inf	formation	disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, and specifically:
	(within T	7 CFR 1.97(b), or hree months of filing national application; or date of entry of international application; or before ate of first office action on the merits; whichever occurs last)
	under 3	7 CFR 1.97(c) together with either a: Statement Under 37 C.F.R. 1.97(e), or a \$180.00 fee under 37 CFR 1.17(p), or (After the CFR 1.97(b) time period, but before the final office action or notice of allowance, whichever occurs first)
	under 3	7 CFR 1.97(d) together with a: Statement under 37 CFR 1.97(e), and a \$180.00 petition fee set forth in 37 CFR 1.17(p). (Filed after final office action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Applicant(s) submit herewith Form PTO 1449A - Information Disclosure Statement by Applicant together with copies \boxtimes (where required) of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may or may not be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56. As required by 37 C.F.R. §1.98(a), a legible copy of each document is provided.

At any time during the pendency of this application, please charge any fees required to Deposit Account 20-0778 pursuant

to 37 CFR 1.25. The Commissioner is hereby requested to credit any overpayment to Deposit Account No. 20-0778.

A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on the form PTO 1449 and is enclosed herewith.

The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, and/or the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. Any statements or identifications regarding the relevance of any portion(s) of cited references should not be construed as a representation that the most relevant portion(s) have been identified, and the absence of such statements or identifications should not be construed as representations that there are no relevant portion(s). The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is requested that the information disclosed herein be made of record in this application and that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully Submitted,

THOMAS, KAYDEN, HORSTEMEYER

& RISLEY, L.L.P.

By:

Todd Deveau, Reg. No. 29,526

100 Galleria Parkway, Suite 1750 Atlanta, Georgia 30339-5948 770-933-9500

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Form PTO-1449					Attorney Doc 820322-1030			al No. 08,693
INFORMATION DISCLOSURE CITATION					Applicant Mauldin, et al.			
MAY 0 5 2005 (Use several sheets if necessary)					Filing Date June 4, 2004		Group 1711	
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	Item Document		Date	Name		Class	Subclass	Filing Date
Initials		Number	(MM/DD/YYYY))				If Appropriate
F	A1	2002/0184816	12/12/2002	Philipson				
F	A2	2004/0086682	05/06/2004	Rice, et al.				
I	A3	2003/0075824	04/24/2003	Moore, Jr., et al.				
I	A4	2004/0055951	03/25/2004	Shiotani, et al.				
I	A5	2001/0051248	12/13/2001	Jerdee, et al.				
F	A6	2004/0048035	03/11/2004	Bailey, et al.				
P	A7	2004/0001934	01/01/2004	Young				
I	A8	2,639,278	05/19/1953	Stott, et al.				
I	A9	2,958,677	11/01/1960	Kleinschmidt				
A	A10	3,006,867	10/31/1961	Simon				
A	A11	3,696,058	10/03/1972	Teti				
Α	A12	4,003,880	01/18/1977	Sidebotham, et al.				
Α	A13	4,003,881	01/18/1977	Sidebotham, et al.				
A	114	4,064,079	12/20/1977	Sidebotham, et al.	, , , , , , , , , , , , , , , , , , ,			
A	A15	4,079,001	03/14/1978	Haase, et al.				
A	116	4,110,071	08/29/1978	Schaub, et al.				
A	117	4,118,187	10/03/1978	Sidebotham, et al.				
A	A18	4,137,393	01/30/1979	Sidebotham, et al.				
A	119	4,146,704	03/27/1979	Seki, et al.				
Α	120	4,165,288	08/12/1979	Teed, et al.			-	
A	A21	4,207,184	06/10/1980	Kaiser, et al.				
Α	122	4,404,104	09/13/1983	Wurster, et al.				
A	123	4,416,936	11/22/1983	Erickson, et al.				
Α	A24	4,546,128	10/08/1985	Nakajima				
A	125	4,581,144	04/08/1986	Marchesi	•			
A	A26	4,613,664	09/23/1986	Tate, et al.				
A	127	4,809,397	03/07/1997	Jacobs, et al.				
A	A28	4,880,510	11/14/1989	Uhrich				
A	129	5,198,471	03/30/1993	Nauman, et al.				
A	A30	5,236,959	08/17/1993	Oakley, et al.				

* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

08/31/1993

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EXAMINER'S SIGNATURE:

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5,240,530

DATE CONSIDERED:

Serial No. Attorney Docket No. Form PTO-1449 820322-1030 10/708,693 **Applicant** INFORMATION DISCLOSURE CITATION Mauldin, et al. Filing Date (Use several sheets if necessary) Group June 4, 2004 1711 **U.S. PATENT DOCUMENTS** 08/31/1993 David, et al. 5,241,066 B1 09/21/1993 Cockett, et al. B2 5,246,467 Nauman, et al. 01/11/1994 **B**3 5,278,282 Moran, Jr. 01/18/1994 **B4** 5,280,105 Fink 02/22/1994 **B**5 5,288,349 5,294,384 03/15/1994 David, et al. **B6** 08/30/1994 Serad 5,342,854 **B**7 Weber 11/01/1994 B8 5,360,551 07/04/1995 Subramanian **B9** 5,430,068 09/26/1995 Marchesi B10 5,453,202 10/10/1995 Ahrweiler B11 5,456,872 10/31/1995 Isao, et al. B12 5,462,223 Schwarz, et al. 12/05/1995 B13 5,472,763 01/09/1996 Smith, et al. 5,481,786 B14 05/14/1996 Yamamoto, et al. 5,516,050 B15 Sharer 05/21/1996 5,518,188 B16 07/02/1996 Corbin, et al. B17 5,532,035 Corbin, et al. 07/23/1996 B18 5,538,776 Forero 09/19/1997 5,556,684 B19 10/15/1996 Sullivan, et al. **B20** 5,565,158 11/26/1996 Fink **B21** 5,578,357 David, et al. 01/07/1997 **B22** 5,591,802 Dilly-Louis, et al. 02/04/1997 B23 5,598,980 02/18/1997 Long, et al. 5,604,009 B24 05/06/1997 Kotlair, et al. B25 5,626,939 Corbin, et al. 05/20/1997 5,630,896 **B26** 06/17/1997 Stogner, Jr. **B27** 5,639,379 09/09/1997 Moore, et al. 5,665,784 **B28** 01/06/1998 5,704,104 Bacon, et al. **B29** Fink 03/17/1998 5,728,444 **B30** Shutov 06/23/1998 B31 5,769,335 07/14/1998 Reeves, et al. B32 5,780,520 * EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant. DATE CONSIDERED: **EXAMINER'S SIGNATURE:**

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Form PTO-1	orm PTO-1449				Attorney Doc 820322-1030		Serial No. 10/708,693		
INF	OR	MATION DISC	LOSURE CI	TATION	Applicant Mauldin, et	al.			
	(Use several sheets if necessary)				Filing Date June 4, 2004			Group 1711	
		-10	U.S. PA	TENT DOCUMEN	TS				
	D1	6,398,891	06/04/2002	Corbin, et al.					
	D2	6,503,595	01/07/2003	Kim, et al.					
	D3	6,610,769	08/26/2003	Blanpain, et al.					
			FOREIGN I	PATENT DOCUM	ENTS				
		Document Number	Date (MM/DD/YYYY)	Count	ry	Class	Subclass	Translat Yes	tion No
	D4	143,502	11/15/1971	Czechoslovakia				X	
	D4	0 759 456		Europe				X	
	D6	0 603 434		Europe	•			Abstract	
	D7	43 43 784		Germany				X	
	D8	2000-044724		Japan				X	120 10
	D9	WO 98/06778		PCT				X	
-	D10	WO 98/35077		PCT				X	, _
	D11	WO 98/35998		PCT	, <u>, , , , , , , , , , , , , , , , , , </u>			X	
	D12	WO 99/40250	08/12/1999	PCT				X	
-	D13	WO 00/27245	05/18/2000	PCT			-	X	
]	D14	WO 00/27916	05/18/2000	PCT				X	
]	D15	WO 00/29463	05/25/2000	PCT				X	
	D16	WO 01/45942	06/28/2001	PCT				X	
	D17	WO 01/76869	10/18/2001	PCT				X	
]	D18	WO 02/01989	01/10/2002	PCT				X	
]	D19	WO 02/02310	01/10/2002	PCT				X	
	D20	WO 02/02864	01/10/2002	PCT				X	
	D21	WO 02/11589	02/14/2002	PCT				X	
		OTHER DOC	UMENTS (Includ	ling Author, Title, L	Date, Pertinent l	Pages, etc	c.)		·
		Abdel-Gawad AS Eman Dye Compounds Using Water, Wastwater and S	Gamma Ray Irradia	tion. In: Use of Irradi	ation for Chemic	al and Mid	crobial Decor	Organic Testion	extile
		Bloch DR. Solvents and Non Solvents for Polymers. In: Polymer Handbook, Eds. Bandrup, J. Immergut, EH, Grulke, EA, 4 th Edition, John Wiley, New York, pp. 497-545, 1999.							
		Calabro V, Pantano G, et al. Experimental Study on Integrated Membrane Processes in the Treatment of Solutions simulating Textile Effluents. Energy and Exergy Analysis. In: Desalination. 78:257-277, 1990.							
	D25	Dávila-Jiménez MM, E performance liquid chro	lizalde-González, et omatography with di	al. Electrochemical tode array detection.	reatment of textil In: Journal of Ch	e dyes and romatogra	their analysi phy. A, 889:2	s by high- 253-259, 20)00.
* EXAMINER	: Init	tial if citation considered,	whether or not citation	is in conformance with	MPEP § 609. Dra	w line thro	ugh citation if	not in	
conformance at EXAMINER		considered. Include copy	or this form with nex		CONSIDERED:			<u> </u>	
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Form PTO-14	49	Attorney Docket No. 820322-1030	Serial No. 10/708,693			
INFO	RMATION DISCLOSURE CITATION	Applicant Mauldin, et al.				
	(Use several sheets if necessary)	Filing Date June 4, 2004	Group 1711			
Е	Dessouki AM, Abdel-Aal SE, et al. Use of Polymeric and Na Acid Dyes form Effluents. Seventh Conference of Nuclear Se	tural Materials for the Removal of ciences & Applications 6-10 Febru	Irradiated Direct and ary 2000, Cairo, Egypt.			
E	Gültekin I and Ince NH. Kinetics of Textile Dye Degradation by UV/H ₂ O ₂ Process. International conference on oxidation technologies for water and wastewater treatment, with technical exhibitions, 18-22 May 2003, Goslar, Germany.					
E	Kos L, Perkowski J. Decoluration of Real Textile Wastewater with Advanced Oxidation Processes. In: Fibres & Textiles in Eastern Europe. 11(4(43)):81-85, 2003.					
E	Mihut C, Captain DK, et al. Review: Recycling of Nylon From Carpet Waste. In: Polymer Engineering and Science. 41(9):1457, 2001.					
E	Muegge, J and Yernaux JM. Recovery of Plastics Using Solvents. In: Plastics in End of Life Vehicles. pp. 1-4, 2002.					
Е	Öğütveren ÜB and Koparal S. Color Removal From Textile Effluents by Electrochemical Destruction. In: J. Envoron. Sci. Health. A29(1):1-16, 1994.					
Е	Pelegrini R, Peralta-Zamora P, et al. Electrochemically Assisted Photocatalytic Degradation of Reactive Dyes. In: Applied Catalysis B: Environmental. 22:83-90, 1999.					
Е	Perkowski J, Kos L, et al. Decomposition of Anthraquinone l Wastewater by Advanced Oxidation Process. In: Fibres & Te	Perkowski J, Kos L, et al. Decomposition of Anthraquinone Dye Acid Blue 62 by the Decoloration of Textile Wastewater by Advanced Oxidation Process. In: Fibres & Textiles in Eastern Europe. 2(41):88-94, 2003.				
Е	Prevot AB, Basso A, et al. Analytical Control of Photocatalytic Treatments: Degradation of a Sulfonated Azo Dye. In: Anal. Bioanal. Chem. 378:214-220, 2003.					
E	Şolpan D and Güven. Decoloration and Degradation of Some Textile Dyes by Gamma Irradiation. In: Radiation Physics and Chemistry. 65:549-558, 2002.					
Е	Starkweather HW and Jones, GA. Crystalline Transitions in Powders of Nylon 66 Crystallized from Solution. In: Journal of Polymer Science: Polymer Physics Ed. 19:467-477, 1981.					
Е	Xu Y. Comparative Studies of the Fe ^{3+/2+} -UV, H ₂ O ₂ -UV, TiO ₂ -UV/vis Systems for the Decolorization of a Textile Dye X-3B in Water. In: Chemosphere 43:1103-1107, 2001.					
E	Nylon 6,6 Specific Heat and Heat of Melting. In: Manufacturing Engineer's Reference Book, 1993.					
* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.						
		ATE CONSIDERED:				

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